Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method to provide information from a first information storage and retrieval system to a second information storage and retrieval system, comprising the steps of:

providing ~~a~~ said first information storage and retrieval system, wherein said first information storage and retrieval system comprises (N) PPRC adapters, a plurality of host adapters, at least one host computer interconnected with at least one of said plurality of host adapters, a cache, a plurality of device adapters, a plurality of disk drives interconnected with said plurality of device adapters, and information;

providing ~~a~~ said second information storage and retrieval system, wherein said second information storage and retrieval system is capable of receiving said information from said first information storage and retrieval system via one or more of said (N) PPRC adapters;

~~generating an Established Path Bitmap, wherein said Established Path Bitmap recites said (N) PPRC adapters;~~

~~generating an Available Path Bitmap;~~

ascertaining, for each value of (j), if the (j)th PPRC adapter is in communication with said second information storage and retrieval system, wherein (j) is greater than or equal to 1 and less than or equal to (N);

operative if the (j)th PPRC adapter is in communication with said second information

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

storage and retrieval system, ~~adding said (j)th adapter to said Available Path Bitmap~~ including said (j)th PPRC adapter as one of (M) tested adapters, wherein (M) is less than or equal to (N);

~~saving said Available Path Bitmap, wherein said Available Path Bitmap recites (M) PPRC adapters, wherein each of said (M) PPRC adapters is in communication with said second information storage and retrieval system, and wherein (M) is less than or equal to (N).~~

2. (currently amended) The method of claim 1, further comprising the steps of:

generating a PPRC task;

~~copying said Available Path Bitmap as a Working Bitmap;~~

selecting the (i)th tested adapter ~~from said Working Bitmap~~, wherein (i) is greater than or equal to 1 and less than or equal to (M), and wherein (i) is initially set to 1;

attempting to provide information to said second information storage and retrieval system using said (i)th tested adapter.

3. (original) The method of claim 2, wherein said first information storage and retrieval system is capable of communication with one or more host computers, further comprising the steps of:

receiving said information by said first storage and retrieval system information from said one or more host computers; and

generating a PPRC request comprising providing said information to said second information storage and retrieval system.

4. (currently amended) The method of claim 2, further comprising the steps of:

determining if said information was received by said second information storage and retrieval system using said (i)th tested adapter;

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

operative if said information was not received by said second information storage and retrieval system using said (i)th tested adapter, establishing if (i) equals (M);

operative if (i) does not equal (M):

incrementing (i);

repeating said selecting step, said attempting step, said determining step, and optionally said incrementing step.

5. Canceled.

6. Canceled.

7. (currently amended) The method of claim 4 ~~6~~, further comprising the steps of:

operative if said information was not provided to said second information storage and retrieval system using any of said (M) tested adapters, choosing the (k)th PPRC adapter ~~from said Working Bitmap~~, wherein (k) is greater than or equal to 1 and less than or equal to (N), and wherein (k) is initially set to 1;

~~sending said information to said second information storage and retrieval system using said (k)th adapter.~~

8. (currently amended) The method of claim 7, further comprising the steps of:

verifying that said information was received by said second information storage and retrieval system using said (k)th PPRC adapter;

operative if said information was not received by said second information storage and retrieval system using said (k)th PPRC adapter:

comparing (k) with (N);

operative if (k) does not equal (N):

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

increasing (k) by 1;

repeating said choosing step, said sending step, said verifying step, and optionally said increasing step.

9. Canceled.

10. The method of claim 8 ~~9~~, further comprising the steps of:

operative if said information was not received by said second information storage and retrieval system by sending said information using said (k)th PPRC adapter, and if (k) equals (N), providing an error message.

11. (currently amended) An article of manufacture comprising a computer ~~useable~~ readable medium having computer readable program code disposed therein to provide information from a first information storage and retrieval system to a second information storage and retrieval system, wherein said first information storage and retrieval system comprises (N) PPRC adapters, a plurality of host adapters, at least one host computer interconnected with at least one of said plurality of host adapters, a cache, a plurality of device adapters, a plurality of disk drives interconnected with said plurality of device adapters, and information, and wherein said second information storage and retrieval system is capable of receiving said information from said first information storage and retrieval system via one or more of said (N) PPRC adapters, the computer readable program code comprising a series of computer readable program steps to effect:

~~retrieving an Established Path Bitmap, wherein said Established Path Bitmap recites said (N) PPRC adapters;~~

~~generating an Available Path Bitmap;~~

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

ascertaining, for each value of (j), if the (j)th PPRC adapter is in communication with said second information storage and retrieval system, wherein (j) is greater than or equal to 1 and less than or equal to (N);

operative if the (j)th PPRC adapter is in communication with said second information storage and retrieval system, ~~adding said (j)th adapter to said Available Path Bitmap~~ including said (j)th PPRC adapter as one of (M) tested adapters, wherein (M) is less than or equal to (N);

~~saving said Available Path Bitmap, wherein said Available Path Bitmap recites (M) PPRC adapters, wherein each of said (M) PPRC adapters is in communication with said second information storage and retrieval system, and wherein (M) is less than or equal to (N)~~.

12. (currently amended) The article of manufacture of claim 11, said computer readable program code further comprising a series of computer readable program steps to effect:

generating a PPRC task;

~~copying said Available Path Bitmap as a Working Bitmap;~~

selecting the (i)th tested adapter ~~from said Working Bitmap,~~ wherein (i) is greater than or equal to 1 and less than or equal to (M), and wherein (i) is initially set to 1;

attempting to provide said information to said second information storage and retrieval system using said (i)th tested adapter.

13. (original) The article of manufacture of claim 12, wherein said article of manufacture is capable of communication with one or more host computers, said computer readable program code further comprising a series of computer readable program steps to effect:

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

receiving said information by said article of manufacture from said one or more host computers; and

generating a PPRC request comprising providing said information to said second information storage and retrieval system.

14. (currently amended) The article of manufacture of claim 12, said computer readable program code further comprising a series of computer readable program steps to effect:

determining if said information was received by said second information storage and retrieval system using said (i)th tested adapter;

operative if said information was not received by said second information storage and retrieval system using said (i)th tested adapter, establishing if (i) equals (M);

operative if (i) does not equal (M):

incrementing (i);

repeating said selecting step, said attempting step, said determining step, and optionally said incrementing step.

15. Canceled.

16. Canceled.

17. (currently amended) The article of manufacture of claim 14 ~~16~~, said computer readable program code further comprising a series of computer readable program steps to effect:

operative if said information was not received by said second information storage and retrieval system using any of said (M) tested adapters, choosing the (k)th PPRC adapter,

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

wherein (k) is greater than or equal to 1 and less than or equal to (N), and wherein (k) is initially set to 1;

sending said information to said second information storage and retrieval system using said (k)th PPRC adapter.

18. (currently amended) The article of manufacture of claim 17, said computer readable program code further comprising a series of computer readable program steps to effect:

verifying that said information was received by said second information storage and retrieval system using said (k)th PPRC adapter;

operative if said information was not received by said second information storage and retrieval system using said (k)th PPRC adapter:

comparing (k) with (N);

operative if (k) does not equal (N):

increasing (k) by 1;

repeating said choosing step, said sending step, said verifying step, and optionally said increasing step.

19. Canceled.

20. (currently amended) The article of manufacture of claim 18, said computer readable program code further comprising a series of computer readable program steps to effect providing an error message ~~operative~~ if said information was not received by said second information storage and retrieval system by sending said information using said (k)th PPRC adapter, and if (k) equals (N), providing an error message.

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

21. (currently amended) A computer program product encoded in an information storage medium, said computer program product being usable with a ~~usable with a~~ programmable computer processor ~~having computer readable program code embodied therein~~ to provide information from a first information storage and retrieval system to a second information storage and retrieval system, wherein said first information storage and retrieval system comprises (N) PPRC adapters, a plurality of host adapters, at least one host computer interconnected with at least one of said plurality of host adapters, a cache, a plurality of device adapters, a plurality of disk drives interconnected with said plurality of device adapters, and information, and wherein said second information storage and retrieval system is capable of receiving said information from said first information storage and retrieval system via one or more of said (N) PPRC adapters, comprising:

~~computer readable program code which causes said programmable computer processor to retrieve an Established Path Bitmap, wherein said Established Path Bitmap recites said (N) PPRC adapters;~~

~~computer readable program code which causes said programmable computer processor to generate an Available Path Bitmap;~~

computer readable program code which causes said programmable computer processor to ascertain, for each value of (j), if the (j)th PPRC adapter is in communication with said second information storage and retrieval system, wherein (j) is greater than or equal to 1 and less than or equal to (N);

computer readable program code which, if the (j)th PPRC adapter is in communication with said second information storage and retrieval system, causes said programmable computer

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

processor to ~~add said (j)th adapter to said Available Path Bitmap~~ include said (j)th PPRC adapter as one of (M) tested adapters, wherein (M) is less than or equal to (N);

~~computer readable program code which causes said programmable computer processor to save said Available Path Bitmap, wherein said Available Path Bitmap recites (M) PPRC adapters, wherein each of said (M) PPRC adapters is in communication with said second information storage and retrieval system, and wherein (M) is less than or equal to (N).~~

22. (currently amended) The computer program product of claim 21, further comprising:

computer readable program code which causes said programmable computer processor to generate a PPRC task;

computer readable program code which causes said programmable computer processor to copy said Available Path Bitmap as a Working Bitmap;

computer readable program code which causes said programmable computer processor to select the (i)th tested adapter ~~from said Working Bitmap~~, wherein (i) is greater than or equal to 1 and less than or equal to (M), and wherein (i) is initially set to 1;

computer readable program code which causes said programmable computer processor to attempt to provide information to said second information storage and retrieval system using said (i)th tested adapter.

23. (original) The computer program product of claim 22, wherein said first information storage and retrieval system is capable of communicating with a host computer, further comprising:

computer readable program code which causes said programmable computer processor

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

to receive by said first information storage and retrieval system said information from said one or more host computers; and

computer readable program code which causes said programmable computer processor to generate a PPRC request comprising providing said information to said second information storage and retrieval system.

24. (currently amended) The computer program product of claim 22, further comprising:

computer readable program code which causes said programmable computer processor to determine if said information was received by said second information storage and retrieval system using said (i)th tested adapter;

computer readable program code which, if said information was not received by said second information storage and retrieval system using said (i)th tested adapter, causes said programmable computer processor to sequentially increment (i) and attempt providing said information to said second information storage and retrieval system using, for each incremental value of (i), the (i)th tested adapter until said information is received by said second information storage and retrieval system or until (i) equals (M).

25. Canceled.

26. Canceled.

27. (currently amended) The computer program product of claim 24 ~~25~~, further comprising:

operative if said information was not received by said second information storage and retrieval system using any of said (M) tested adapters, computer readable program code which

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

causes said programmable computer processor to choose the (k)th PPRC adapter ~~from said Working Bitmap~~, wherein (k) is greater than or equal to 1 and less than or equal to (N), and wherein (k) is initially set to 1;

computer readable program code which causes said programmable computer processor to send said information to said second information storage and retrieval system using said (k)th PPRC adapter.

28. (currently amended) The computer program product of claim 27 ~~6~~, further comprising:

computer readable program code which causes said programmable computer processor to verify that said information was received by said second information storage and retrieval system using said (k)th PPRC adapter;

computer readable program code which, if said information was not received by said second information storage and retrieval system using said (k)th PPRC adapter, causes said programmable computer processor to sequentially increment (k) and attempt sending said information to said second information storage and retrieval system using, for each incremental value of (k), the (k)th PPRC adapter until said information is received by said second information storage and retrieval system or until (k) equals (N).

29. Canceled.

30. (currently amended) The computer program product of claim 28, further comprising computer readable program code which, if said information was not received by said second information storage and retrieval system after sending said information using each of said (N) PPRC adapters, causes said programmable computer processor to provide an error

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

message.

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114